IVY TECH COMMUNITY COLLEGE

Thomas J. Snyder
President

March 7, 2008

Mr. Stanley G. Jones, Commissioner
Indiana Commission for Higher Education
101 W. Ohio Street, Suite 550
Indianapolis, IN 46204

Dear Stan:

First, let me thank you for the opportunity that you have provided for Ivy Tech Community College to provide substantive input in drafting a white paper on the role of Ivy Tech as the comprehensive statewide community college in the system of public higher education in Indiana.

Using the original draft prepared by your staff, we have expanded upon those ideas and developed the enclosed draft for your consideration for inclusion in the series of white papers that the Commission is preparing on higher education in Indiana.

We have employed Dr. Jim Jacobs, Research Fellow, Center for Community College Research, Teachers College, Columbia University in developing this paper. Dr. Jacobs was of great help to us in framing the role of Ivy Tech Community College in Indiana within the context of how other systems of comprehensive community colleges play vital roles in their state systems of public higher education.

We look forward to further discussion regarding the ideas contained in this paper.

Respectfully,

Thomas J. Snyder
President

Enclosure

50 WEST FALL CREEK PARKWAY NORTH DRIVE
INDIANAPOLIS, IN 46208-5752
P. 317-921-4860
F. 317-921-4864

The Role of Ivy Tech Community College In the System of Public Higher Education In Indiana

James Jacobs
Community College Research Center

Not for Citation

March 6, 2008

The Promise of Community Colleges:

The comprehensive community college is one of the most important achievements of American higher education. This uniquely American institution, which is now being emulated in many other nations, emerged after World War II from two major sources. First was the century old two-year "junior college," which granted academic degrees and often served as finishing schools for many young women who entered the formerly all-male occupations. These were often developed by local school districts or cities to serve their citizens. The second source was community technical centers, which were initiated by many local school boards to provide specialized vocational programs for local high schools, but found they could also service adults who were often seeking the same education. Combining the mission of these two predecessors, from the outset, the comprehensive community college had a dual mission of providing both academic transfer degrees and workforce education. These missions reflected the desires of post-war American society for citizens to have the opportunity for a college education, as well as the desire for a trained workforce as part of government's responsibility to provide a growing economy. Both were critical to the students and the communities these institutions served.

Seventy-five percent of the current 1,200 community colleges were established in a period from 1945 to 1975. Their organizational development took many different forms depending upon the specific alignment of state political and economic forces, and the specific needs of communities. The North Carolina community college system was created in the late 1950s by a governor who viewed these institutions as part of a strategy to move the economy of the state away from agriculture and attract northern manufacturing industries such as textiles. In Michigan, the constitution of the state was rewritten in the early 1960s to provide state support for colleges, only if a local community would tax itself to provide financial support for the institution. California developed a system of community colleges as part of a statewide plan for higher education, and they were to provide low-cost post-secondary education to feed into the California State four-year system. Whichever of their specific origins, the dual mission of transfer and workforce development was woven into the institutional framework of these new institutions. Thus, there was both academic rigor and preparation for transfer to the four-year college and workforce-training missions embedded within these institutions.

In the early 1950s these new institutions represented only a fraction of the higher education students. Today they now enroll more students who start post-secondary education in the United States than any other higher education sector. More than 6.6 million students start their post-secondary experience at community colleges. The American Association of Community Colleges assumes an additional 5 million students are enrolling in non-credit programs, making the total 11.6 million students. Community colleges) provide the largest source of transfer students to four-year institutions, nearly half of baccalaureate degree students attended a community college. (ETS Report, 2008

In addition, community colleges have developed their workforce education programs to be the major national provider of "middle level" (occupations which require more than

high school, but less than a four-year degree) occupations in the United States. More than 60 percent of all nurses practicing in the United States took their initial nursing training at community colleges. More than one-third of all new teachers employed in the United States started their post-secondary careers at community colleges. Most of the apprentices in manufacturing sectors of auto and steel receive their classroom instruction at a community college. A significant number of information technology technicians, biotechnology technicians and designers take their technical classes at community colleges. Studies of employers continue to indicate that they view community colleges as significant sources of trained skilled workers.

This growth has largely occurred because the community college has attracted a new type of post-secondary student. There are more minority students and adults attending community colleges. In 2006-2007, 58 percent of Hispanic students in higher education enrolled in two-year colleges and 50 percent of all Black/Non-Hispanic students were enrolled in two-year colleges. Both Hispanic and Black enrollments at two-year colleges increased in the last decade, while their enrollment in four-year colleges actually declined. (GAO study, Nov. 2007). Many of these institutions have enrollments of the "non-traditional" student who may be older than 24, working full-time, and having families of their own. According to national surveys of post-secondary students, 32 percent of all community college students had dependent children, compared to 13.2 percent for public four-year colleges. Forty-two percent of community college students came from families who made less than $30,000 a year. Two-thirds were going to school part-time, compared to less than 30 percent for four-year public schools. Because of these factors, many students are forced to juggle their roles as employee, parent and student, resulting in their needs for flexible delivery of courses day and night with low-cost good instruction.

For years, these institutions have fought the stigma of being a "junior college," the subordinate to the four-year schools in quality and status in the higher education community. Moreover, many policy makers and educators from four-year institutions still fail to understand the importance of viewing community colleges as distinct institutions with missions and roles that are different from their four-year counterparts within American higher education. It has also produced a strong insecurity complex among the institutions that are overly sensitive to criticism about their role and importance within higher education.

This paper will attempt to outline the contributions of the Ivy Tech Community College and the challenges the institution faces. It will try to position the development and growth of the institution within the modern community college as distinctive from other forms of higher education, and discuss the challenges it faces in performing its mission within the state of Indiana. The paper will utilize data from the institution, and situate the achievements of Ivy Tech within the context of national evidence concerning the modern comprehensive community college. It will start from an important assumption: no state can address the higher education and workforce needs of its citizens without the development of a comprehensive community college. Comprehensive community

colleges are the gatekeepers of opportunity for the citizens whose families have not experienced post-secondary education.

National Issues Confronting Community Colleges:

Even though community colleges are new forms of higher education, because of their size and impact there are many issues confronting these institutions. In their desire to serve as many students as possible, the colleges have not focused on student success in terms of completion of degrees, but instead have stressed expanded access to higher education. Seventeen percent of starting community college students have not completed 10 credit hours; an additional 33 percent have earned more than 10 credits but no degree. About 15 percent earned an associates degree, and 18 percent earned a four-year degree. (Bailey and Morest, 2006). More troubling perhaps is the vast differences of community college performance in the graduation rates within states. Using the standard national measurement of the percent of full-time, first-year students who were obtaining an associate degree three years after enrolling, the states range from more than 60 percent to less than 13 percent suggesting a wide variance in the attention paid by these institutions to the earning of credentials. Even within specific states, there is considerable variance between community colleges, depending on local conditions, institutional leadership, and the priorities established by campus leadership.

While there are many issues with the reliability of the data, and many community college practitioners quickly point out that many of their students do not come to their institutions to complete degrees or even transfer to four-year institutions, there is increasing recognition that these institutions need to focus on student success and not just access. This has motivated programs such as the *Achieving the Dream Initiative*, which concentrates on college success. Colleges are attempting to understand the many reasons why more students are not earning a degree or certificate for a coherent course of study.

A second critical issue within the community colleges is the efficiency and effectiveness in their relationships to other educational institutions. Community colleges exist within a network of other institutions and the success of students is in large part conditioned by how well these relationships are managed. This is the broad area often referred to as transitions. As open door institutions, community colleges accept a very heterogeneous student body bringing many different learning capabilities and previous backgrounds, often all in the same classroom. How well the community college can influence the "crossover" into the culture of the community college becomes very significant for the future role they will play within the higher educational system. This refers both to the interactions of the community colleges with students who come from K-12 systems, and to students who are leaving community colleges to attend four-year institutions. The heterogeneity of the community college student body tests the ability of the colleges to develop programs, which can flexibly embrace students from many difference lifestyles and backgrounds. Community colleges must signal to high school students what are the expectations in performing college level work. At the same time, they must insist that four-year colleges accept the credits of their institutions. This has produced many interesting federal programs, such as *Tech Prep*, plus increasing numbers of articulation

programs with four-year universities and colleges. Juggling these factors and aligning the curriculum to promote student success is an extremely difficult part of the community college agenda. Community colleges are struggling with their "fit" within the educational community.

A third issue is the growing changes in the skills needed within the American workforce. Community colleges have prided themselves on being the national training system for both incumbent workers and those who are entering the work force. Increasingly, for many of the middle-level entry jobs, advancement is based on the ability of an individual to earn a four-year college degree. The demands at the workplace for greater skills will require more post-secondary education and training than in the past. Community colleges have been quick to grasp the new information technologies and the impact they have on the workplace; but now they are challenged to package them and relate them to the four-year degrees -- or make sure technical skills are combined with critical thinking skills. As employers demand more degrees and certificates as signs of completion, there is a need for the workforce programs to lead to new forms of certificates and degrees. Indeed, for the first time, there is a convergence of the traditional transfer and workforce mission, where students are faced with the need for both technical and liberal arts skills.

All of these issues are especially pronounced when community colleges are attracting many adult students, over the age of 24, to their programs. The role the colleges play in the workforce training of many states means that adults are seeking out the colleges for new skills to obtain sustainable jobs. They are often under-prepared in terms of their learning skills. Colleges are forced to take on issues of adult basic education in new ways, which go beyond the traditional measurement of the GED as the entry point for access to sustainable work. The colleges are challenged to raise the skill sets of these adults with programs which combine the foundation skills with workforce and technical skills as a means of advancing both simultaneously.

Finally, there is the issue of shrinking resources. In large part, community colleges are public institutions established through combinations of local initiative and state policy. In the last two decades, states have significantly reduced funding to community colleges. In 1980 and 1981, 22 states contributed at least 60 percent of the revenue to the budgets of their community colleges. These states enrolled half of the community colleges students in the United States. By 2001, only seven states provided 60 percent of the revenue and they enrolled eight percent of the community college students.(Issues In Higher Education, 2006) Even in those states that have continued to increase funding, the per capita support for students at community college is often less than half what is given to four-year students. Given the learning challenges faced by community colleges, students who often have significant developmental education issues require substantial remediation. Since these students are more likely to come from low-income families, raising the tuition rates is hardly an appropriate strategy. The lack of adequate funding of the system is a significant barrier preventing community colleges from achieving greater success in bringing more post-secondary education and student success to families that have not experienced college. These are the students who need the most student support services, yet they receive the least resources to perform their difficult tasks.

Ivy Tech Community College of Indiana:
Development of a Comprehensive Community College System

The development of Ivy Tech Community College reflects many of the national issues and trends associated with the modern comprehensive community college. The state was relatively late in developing a comprehensive community college system, after having rejected the comprehensive community college as an institution to serve the post-secondary needs of Indiana. In 1961, the Post High School Committee established the first master plan for Indiana post-secondary education. In contrast to other states, which during this period were establishing community colleges, the report issued by the committee did not call for the establishment of a community college system. Rather, a division was made between the transfer mission, which was to be performed by regional campuses of Purdue and Indiana University, and the "vocational mission" to be developed by a new group of vocational schools established in their local communities named Indiana Vocational Technical College. These institutions were expressly prohibited from developing academic degrees and concentrated their efforts at providing adequate entry-level workers for local industry. The decision to split the functions not only prevented Indiana from increasing the post-secondary completion rates of adults; it has contributed to a good deal of misunderstanding among state policy makers concerning the role of the comprehensive community college serving both these missions within a higher education system.

There often is a misperception held by policy makers that because the institution is relatively new as a community college, it somehow lacks a particular dimension of community colleges, or somehow is deficient in one or another key mission, which exists in other states systems. Part of the problem may lie in the tendency to compare Ivy Tech with the four-year colleges and universities, when it is far more appropriate to view the community colleges as a separate and distinct entity with its own mission and set of key measurements of institutional effectiveness. Community colleges are part of higher education and serve a unique role of providing transfer and workforce education to many adults and their families who do not enter four-year colleges.

An examination of the data compiled by the institution and agencies such as the Higher Education Commission of Indiana indicates that Ivy Tech possesses most of the strengths and challenges of existing community colleges in other states. Throughout its evolution from a technical institute to a community college, the institution has maintained a dual mission of both transfer and workforce development. What might be unique is the significant expansion of the enrollment of the institution. The growth rates of Ivy Tech are considerably higher than most community colleges or community college systems in the Great Lakes states. This no doubt reflects the relatively recent development of the institution. Enrollments continue to grow: from 59,320 in 2001 to 78,776 in 2007 a 33 percent growth in six years (based on fall end-of-term counts).

There is a considerable potential for Ivy Tech to increase its enrollment significantly. To appreciate the potential enrollment growth of Ivy Tech, one need only look at enrollments in the neighboring state of Michigan. That state has an overall population of a little over 10 million residents, and an enrollment of 220,000 credit students among the 28

Michigan community colleges. Assuming a similar ratio of students to per capita population, Ivy Tech could increase its enrollment by another 60,000 students to over 126,000 students.

The backgrounds of the students drawn to the institution are as important as the enrollment growth of Ivy Tech. As noted by the Commission of Higher Education, Indiana ranks 10th in the nation among states with the proportion of high school graduates who immediately go on to college, having increased its college-going rate from 34 percent in 1992 to 62 percent today. However, the state lags the rest of the nation in the number of adults over the age of 25 with a college certificate or degree. Comparisons with other Great Lakes States, using the *Measuring up Record Card*, indicate that Indiana trails significantly in the number of adults with post-secondary credentials. Thirty-six percent of Indiana's adults (ages 25-64) have completed high school, but have no college experience, the sixth highest in the nation. The major higher education unmet need is the expansion of the adult population participation and completion of post-secondary degrees and certificates.

According to enrollment reports by Ivy Tech, 49 percent of the students are "non-traditional" age 25 and older. Additional student profile data gathered as part of a national Student Opinion Survey conducted by ACT indicates that:

- One quarter of Ivy Tech students are married and almost 39 percent have dependent children
- Seventy three percent are working; 37 percent were working more than 31 hours a week
- Thirty percent of the students reportedly came from households of less than $30,000 incomes
- Only 17 percent reported their parents graduated from college and 40 percent have parents with a high school education or less
- Eleven percent of the students are African-American and another three percent Hispanic.

These demographics strongly suggest Ivy Tech is doing exactly what community colleges do in the national setting. They are attracting many adults and students from low-income families who have little previous experience with a college education. In this regard, they are serving a very important economic development mission for the state of Indiana. As the changes in the economy produce a demand for higher levels of education, in order to be competitive states must increase the numbers of its adult population with post-secondary experiences. Ivy Tech is playing a critical role in bringing post-secondary education to these adults.

These students are concentrating on programs that are related to employment. Over 14,000 are taking classes in technology areas, an additional 8,000 in health care, 3,500 in education areas and 13,000 in business. Almost 15,000 are in liberal arts programs: mostly students seeking liberal arts or general studies transfer degrees from Ivy Tech, or students enrolled in liberal arts courses who are planning to transfer without completing a degree. These general areas correspond well to the needs of the Indiana economy.

With the significant number of adults 25 and older entering the Ivy Tech system, it is not surprising that many are unprepared for college level work and must start their college experience in developmental programs. According to 2004-2005 enrollment figures, 66 percent of the total number of students entering Ivy Tech must take at least one remedial course in English or mathematics.

These numbers are similar to data collected on individual students from other institutions. Data from the National Education Longitudinal Study (NELS) found that 58 percent of community college students take at least one remedial course, 44 percent take between one and three remedial courses and 14 percent take more than three courses. (Levin and Calcagno, 2007). *Achieving the Dream: Community Colleges Count* is a national initiative funded by the Lumina Foundation and other foundations involving more than 80 community colleges in 15 states. It requires each college to submit details on institutional remediation. The data from these colleges, which are representative of institutions with more low-income and minority students, indicate that close to 75 percent of students in colleges participating in the initiative enroll in developmental education.(ADT website). A recent study of 15 community colleges, completed by the Community College Research Center, found that between 14 and 68 percent of the urban campuses with large non-white enrollments have significantly more students needing remediation.(Bailey and Morest, 2006). Because each college utilizes a different definition of remediation, the percentages requiring remediation vary considerably.

Moreover, the issue is not the size of remediation, but what happens to students who are in remediation: for example, how fast they progress out of the remediation into college-level work. National data indicates that about 70 percent of the students in remediation pass remedial reading and writing courses, but only 30 percent complete their remedial mathematics courses. (Levin and Calcagno, 2007). Initial findings from Ivy Tech indicate that one-third of all students who required remedial courses in the 2005-2006 academic year were able to complete their remedial work during that academic year. Moreover, of the students who completed their remediation, almost 85 percent were continuing their studies or had graduated from Ivy Tech in the next three terms. These results indicate the institution is able to enroll students who are under-prepared into credit courses and progress toward a degree.

Despite these initial successes, Ivy Tech is focusing on the issue of under-prepared adults. For adult learners the issue of completion has a significant temporal dimension. Adults with family and employment responsibilities cannot wait years to proceed from developmental courses to college-level curriculum. Furthermore, with the traditional federally funded adult education system not under the responsibility of the community college, Ivy Tech is hampered in it ability to create curriculum alignment and programmatic transition with adult basic education.Ivy Tech Community College is very aware of these issues, and is undertaking major new initiatives that will significantly deepen the college's practice with under-skilled adults returning to school. In 2006, the Ivy Tech Community College was awarded a $1 million dollar grant from the Joyce Foundation to begin transforming the curriculum and delivery systems so that more adults would more efficiently and effectively obtain post-secondary credentials. While

this work is just in the initial phases, there are some very promising practices, which have national relevance in the development of strategies, which can accelerate the post-secondary success of adult students.

There are two main dimensions to the grant. Four of the regions -- Muncie, South Bend, Evansville and Columbus -- are contextualizing developmental programs into college-level occupational areas in targeted programs. Under the direction of one of the most widely respected community college practitioners, these projects will test programs with adult students. They have just begun, but the initial results from one of the sites on the student success are comparable to figures from the national leaders of this process -- the Community College of Denver. Indeed, through this grant Ivy Tech has leaped over other community colleges and is playing a major role in the national movement to restructure how community colleges deal with the post-secondary needs of under prepared adults.

A second effort under this grant complements the changes in developmental education. The initiative strives to change adult learning on the credit side with the expansion and development of the College for Working Adults (CWA). The intensive format attempts to experiment with strategies designed to address another issue of adult learning: the acceleration and asymmetrical delivery of curriculum. Adult learners' schedules often conflict with the traditional linear semester model. Other community colleges have experimented with a curriculum delivery system called "chunking" i.e., dividing it up into smaller subunits that can be delivered via a face-to-face and online combination. The CWA proposes to use this model to accelerate the learning of adults by compressing courses into "chunks" which fit the work life of adults. In addition, these programs include a guarantee that students can start a program and receive all the required coursework over a period of two years (in eight-week course formats) and the services necessary to support their success in this alternative format. Ivy Tech has launched this pilot in 13 campuses and currently there are 163 students now in attendance. Preliminary figures indicate that of the students who enrolled in the CWA program in the fall 2007 term, Ivy Tech records show that 82.8 percent of them have returned to the program for the 2008 spring term. This appears to be a very strong level of retention thus far. Grade point averages for their cohorts are also above average and several students have already qualified for membership in Phi Theta Kappa, the national two-year college academic honor society.

Workforce Development Mission:

The workforce development mission is critical to the performance of any progressive community college and Ivy Tech is certainly no exception. However, as an institution whose initial roots were in the traditional vocational education system, Ivy Tech has the challenge of redefining and refocusing this mission upon the demands of the knowledge-based economy emerging within Indiana. In the past, the definition of vocational education meant preparation of unskilled students for entry-level work in traditional manufacturing, construction, and office work. The mission of Ivy Tech Community College and the programs now being offered are far more integrated within the economic development objectives of state policy leaders, and as such, require a higher level of

transferable skills in both technical areas, as well as in critical thinking, communication and problem solving.

The programs at Ivy Tech Community College are designed to prepare students for work, but that process is understood by an appreciation of the regional workforce development needs of the state of Indiana. The college does not just offer programs, but targets these with the needs of the state's labor market. An internal process exists wherein course changes and revisions are justified through a careful analysis of labor market demand. Second, because Ivy Tech Community College is highly aligned with economic development plans of the state of Indiana, the mission of the workforce development department is to raise the technical and foundation skills of the students, so that they can complete a post-secondary credential. In many cases, the occupational program prepares students for transfer into four-year courses and degrees. Ivy Tech's programs track nicely with the national tendency for post-secondary occupational education to lead to four-year degree programs. Third, because the occupational programs are aligned with the needs of Indiana industries, Ivy Tech Community Colleges tried to implement a "career pathway" approach to its occupational programs. A career pathway is a framework for connecting educational programs with integrated work experience and support services, thereby enabling students and workers to combine school, work, and advance over time to better jobs and higher levels of education and training. Career pathways target regional labor markets, focus on employment sectors and provide a target for workforce development by integrating the programs and resources of community colleges and other educational institutions, workforce agencies and social service providers. (Warford et. 2007). Career pathways integrate transferable skills with industry specific skills.

Ivy Tech Community College's central role is in the development of the Indiana workforce -- which it is prepared to meet the challenges of the new economy. As with other mid-west states, Indiana's economy is increasingly dominated by industries that are requiring some forms of post-secondary education. The governor's strategic economic development plan, *Accelerating Growth (2006)* lists "*A skilled labor forces with constantly improving educational aspirations and attainment*" as its' first "critical success factor." The document calls for "*IEDC, DWD and select Indiana post-secondary education institutions, with special focus on Ivy Tech Community College (Ivy Tech) must develop the capacity to diagnose quickly employer workforce needs and deliver rapid-response customized training that builds the necessary employee skill sets.*" Finally, the document calls for a regional growth strategy which focuses economic development upon the specific needs of regions and with these regions five central "clusters" -- advanced manufacturing, chemicals, advanced materials, biomed/biotech (life sciences) and advanced logistics."

Ivy Tech's Department of Workforce and Economic Development (WED) offers education and training directly to Indiana employers through a variety of delivery methods: credit and non-credit courses; face-to-face and online instruction, both at the College and at the workplace; through contract training, i.e., an employers "buys" a class for a designated number of employees in a needed subject area and the course is delivered only to those employees; and through open enrollment courses in which both

individuals may enroll or to which employers may send employees on a third-party pay basis.

In most of these targeted clusters mentioned previously, Ivy Tech Community College has courses and programs many of which have been developed with new resources from the federal government. Through a United States Department of Labor grant, Ivy Tech is in the midst of creating a new degree program in Advanced Manufacturing. This will start with the dual enrollment of high school students and end with an articulation agreement to transfer to Purdue's four-year degree in manufacturing technology. It is not the traditional machine-specific, hands-on course, but rather a rigorous combination of both academic and technology curriculum, which will give students the appropriate education experience to obtain work in advanced manufacturing industries such as automotive manufacturing and composite production. In the chemicals industry Ivy Tech is collaborating with new bio-refinery capacity to develop an associate of applied science program in refinery operation and bio-fuels. This again will lead to a transfer degree to four-year institutions.

Supported by a four-year $2.5 million grant from the Lilly Endowment, Ivy Tech established associate degree programs in biotechnology at South Bend, Lafayette, Terre Haute, Indianapolis, Bloomington, and Evansville. Eight-seven students enrolled in fall 2004; by fall 2007, enrollment had grown to 292 students. Forty-four associate degrees have been awarded in this critical area, and a number of students have transferred to four-year programs. In addition to launching the program, the grant helped build institutional capacity for new types of degree programs for the dual transfer/workforce mission. Key components of the capacity building were state-of-the-art laboratory equipment for life sciences and the development of higher-level science coursework and biotechnology coursework.

Ivy Tech is working with community colleges in five other states to develop a new maintenance technicians program for the major auto industry companies, specifically Toyota and General Motors. This is being funded by the National Science Foundation. In addition, the Columbus region is organizing a training program for entry-level workers at the new plant start-ups for Honda and Toyota.

There have also been efforts to develop programs in logistics within the trucking and freight industry that emphasize the application of sophisticated queuing applications to address issues of loan and routing -- again skills which are often beyond the traditional concept of a dispatcher. There are current plans to expand the culinary/hospitality program in Indianapolis and to initiate a small, minority business development programs within the occupational areas of Ivy Tech. What all of these programs have in common is that they start from a perspective of the skill needs of the local industry or cluster, but develop a broad based career pathway, which allows individual students to continue their education to an associates credential and a four-year degree. Occupational preparation and transfer are combined in a new institutional delivery system for Indiana. It reflects the changes in the work world and provides Indiana with the workforce of the future.

This is the contribution Ivy Tech can make as a community college to the economic development efforts of Indiana.

There is also a significant investment of resources in the production of trained allied health professions for the growing allied health occupations, especially nursing. Registered nurses rank number one on the "Hoosiers Hot Job List." According to the Indiana Department of Workforce Development, from 2004 through 2014 there will be 15,400 new nursing positions open with an average yearly salary of $49,067. There is a significant shortage of nurses, which Ivy Tech hopes to fill. In 2002, Ivy Tech produced 361 nursing graduates, but in 2006, the number had more than doubled to 772. About 83 percent of these nurses successfully completed their NCLEX examination. These nurses were educated at substantially less cost -- associate degree education for registered nurses is delivered more rapidly and cost-effectively in Indiana (at an average annual tuition in 2004–05 of $2,599 at Ivy Tech compared with $5,666 at public four-year colleges). (AACC, Fact Sheet).

In addition to the regular credit programs, Ivy Tech participates in customized training and economic development programs, which have significant impact on hundreds of Indiana employers who benefit from Ivy Tech non-credit customized training and continuing education courses. These programs are initiated from the college's Workforce and Economic Development Department. In 2006-2007, more than 900,000 hours of training were delivered to 9,423 companies involving more than 20,000 students. This training earned many workers industry-recognized certificates which they could use at their workplace. This is not the traditional "vocational education" but rather a means by which Ivy Tech is blending technical training and foundation skills so that individuals receive job-ready skills and the ability to continue their post-secondary education.

Another area of transition is the relationship between the credit programs and the growing numbers of non-credit classes. Many of the non-credit classes are related to workforce education where students do not receive institutional college credit. Some are specifically related to the demands of the community or employer for industry-based certifications. Some examples from Ivy tech that fit this definition include:

- MSSC (Manufacturing Skills Standards Council)
- Welding
- Safe Food Handler
- Insurance (examples: life and health; property/casualty)
- AutoCAD
- Microsoft Office
- Six Sigma
- Powered Industrial Truck

Of importance is how many of these classes are linked to the credit programs and if these students, the bulk of them working adults, "crosswalk" into the credit side of the institution. This remains an important new area of the institution that warrants continued support and more marketing emphasis.

Equally important are the courses and programs found in non-credit education activities and linked to meaningful employment. Some examples of these classes include courses to become a certified nurse assistant, quality management assistant. or emergency medical technician. These programs provide an opportunity for adults to find an entry-level job, which can pay sustainable wages. Once employed they can return to the Ivy Tech to continue their education within credit programs.

The growth of non-credit workforce programs is part of a national trend in workforce education. Many colleges have developed more non-credit workforce programs in order to meet the immediate needs of adults for sustainable wages and stable jobs. The issue for the institution is how to convert these students into their credit programs. However, the practice of Ivy Tech in this area fits very closely to the new trends in community college workforce education. (VanNoy, 2007). The impact of all these workforce programs not only aligns with state of Indiana workforce objectives, but also raises incomes and provides a better life for citizens of Indiana.

Educational Transitions:

Community colleges serve as an important hub in the educational process of a state. They can be critical not only in increasing higher education enrollment; for high school students, they are important in providing an experience of what it takes to perform college-level work. Many studies of high school seniors, especially those from low-income backgrounds, indicate that while they perform well in high school, their knowledge of the demands of post-secondary work is limited. Because community colleges are flexible, based in local communities, and responsive to local demand, they can serve as a transition point for high school students who are uncertain of whether they want to attend college. (Hughes and Mechur, 2007).

Community colleges can supplement traditional high school curriculum with courses and programs by which students can complete their high school education and earn college credits. The national trend of dual enrollment or concurrent enrollment is one of the important new trends influencing the development of community colleges. In several states, including Indiana, there are new policies to encourage the development of dual enrollment programs as a means of encouraging student success. An examination of dual enrollment in a study of College Now, a dual enrollment program in New York City, found that students from 19 vocational high schools who subsequently enrolled in a CUNY community college and who took at least one College Now course while in high school, were more likely to obtain positive outcomes than their classmates who enrolled in CUNY but did not participate in College Now. In particular, College Now participants were more likely to pursue a bachelor's degree, had higher first-semester grade point averages, and earned more credits during their first three and a half years of post-secondary education. This finding was also confirmed by an examination of career and technical education high school students who took dual enrollment courses in Florida. Ivy Tech's extensive dual credit agreements have historically focused on vocation and technical coursework. They have dual credit agreements with 39 of the 47 career centers

and/or co-ops in the state, and with half of the public secondary schools. In 2006-07, Ivy Tech enrolled 7,900 students in high-school based dual credit. Most of the enrollments were in technical coursework. Expansion into dual credit for general education coursework is underway. The distribution of dual credit opportunities among the campuses of Ivy Tech varies considerably, suggesting growth is possible.

Indiana state law does encourage the development of dual enrollment programs. One of the more outstanding features of the law is that if a student takes a dual enrollment course through one institution and that course is already accepted for transfer through an articulation agreement with another institution, then the dual credit course will be accepted for transfer. Ivy Tech could serve as an important means by which secondary students can experience college-level work and continue their education into the four-year colleges without loss of credit.

Transfer to Four-Year Institutions:

One of the major interests of students attending Ivy Tech Community College is to transfer to four-year institutions. Community colleges have always played an important role in providing the foundation experience for students who transfer to a four-year institution. National transcript data examined by Clifford Adleman indicates that once a community college student earns 10 credits or more at a community college, 37 percent transferred to a four-year college and of those, 60 percent earned a degree eight years after they completed high school. (Adleman, 2005).

According to Ivy Tech enrollment data, among students who started at Ivy Tech as first time, degree-seeking students in any of the six cohort years from 1999 to 2004, more than 11,000 students had already transferred to another college by the 2005-06 academic year. Seventy-seven percent of these transfers were to public four-year schools in Indiana. The prototype transfer students are more likely to be under the age 25, going to Ivy Tech full-time, white and female. Most of them completed almost one year at Ivy Tech (26.8 credits), and tended to be enrolled in the General Education Division in one of the leading transfer majors. Normally these students transfer to public four-year colleges relatively close to their homes.

These are impressive numbers for two reasons. Many of these students would not have enrolled in four-year colleges and been successful. Many started in the developmental areas of Ivy Tech and have moved into four-year programs. In addition, most of these students who are educated through the public institutions of Indiana will remain within the state and utilize their education to work and pay taxes in Indiana.

While impressive, the level of transfer students is still below the national average. However, these results were obtained in the period prior to the expanded agreements that have been developed in response to legislative action in the state.
Part of the reason may be because of the relative newness of Ivy Tech as a transfer institution. The public perception of Ivy Tech changes slowly, and many still view the community college as a terminal institution. A major roadblock to degree competition in

Indiana has been the difficulty students have transferring credits as they navigate between Ivy Tech and four-year public institutions. As in many other states, community college students often lose credits, or find they must retake courses to earn degrees. Many of their credits transfer only as electives. The result is not only do students lose credits, but also the taxpayers of Indiana are paying for these inefficiencies by students taking the same classes over, or losing credits from their two-year experience.

Legislative initiatives mandating a Core Transfer Library (CTL), a list of courses that will transfer among all Indiana public college and university campuses, and the creation of statewide articulations for 12 Ivy Tech and Vincennes associate degree programs have further expanded transfer opportunities for Ivy Tech. However, the program agreements with Ivy Tech are specific to each individual public university. These bilateral agreements produce a maze of requirements, which students must master, matching course requirements, program selection, and transfer destinations. For popular programs such as Business Administration, there are 20+ different associate degree curricula, matched to the receiving public universities. Advising students is critical and difficult, given the complexity. To avoid loss of time and credit, students must plan correctly from the beginning exactly what they want to major in and where they want to transfer. The lack of a more comprehensive system for transfer is a barrier to Ivy Tech Community College's realizing its potential to bring more students into four year colleges of Indiana.

The statewide transfer website will provide access to information that will help students negotiate their progress toward transferring to a four-year institution, by making a user-friendly computer-based system accessible to students, parents, counselors. When fully developed, this will be a far more efficient and effective system than what currently exists within the institution. It will not solve the problem of complexity, however. Making transfer a state priority and a goal of the system would enable Ivy Tech to communicate better with its students on what will be expected of them to transfer. It would also produce more students, and more better- prepared students for the four-year institutions in Indiana.

Support for increasing the effectiveness of Ivy Tech need not be a zero-sum game where gains to the community college are considered losses to the four-year system. Indeed, if one myth needs to be dispelled among policy makers it is the belief that a growing and vibrant Ivy Tech will harm the four-year institutions. The opposite is true. Ivy Tech could add considerable new students to the four-year institutions. The student "market" among adults is only beginning to be exposed to post-secondary students -- and only Ivy Tech can begin the process of gaining these new students. According to the 2000 Census, only 21.7 percent of the 4.1 million citizens of Indiana over 24 have a post-secondary degree. This leaves a "potential student market" of 3.1 million citizens and if only five percent of these adults could be attracted back to college through Ivy Tech efforts, they would represent an additional 156,000 new students within the higher education system. That number is almost three times greater than the entire 2005 number of graduates of Indiana high schools. If 10 percent of these students could be transferred to the four-year colleges, they would represent an addition 15, 000 students to the four-year post-secondary institutions. Rather than seeing Ivy Tech as a "competitor" for students, the

four-year colleges would better serve their own interests by viewing the college as a significant collaborator that will attract more students, particularly adults, to their institution.

For policy makers the development of Ivy Tech is important for economic growth. Considering that unlike many of the four-year partners who provide education for many individuals who come from other states and then leave after graduation, Ivy Tech students are more stable and committed to living in Indiana. The skills they learn in the four-year schools stay within the community.

Finances:

Financial issues for community colleges are vital to their mission and goals. There are two important considerations. First, unlike four-year institutions, all comprehensive community colleges are public institutions. There are private vocational institutes that offer a few technical degrees, and a few small private "junior colleges." However, these are marginal institutions. The comprehensive community college is a multi-mission public institution directed at improving post-secondary educational opportunities for the citizens within their service delivery area. Second, because of their public mission, it is expected that the revenue to fund the institutions will not come from the students in the form of tuition. It is anticipated that the majority of revenue for these institutions will come from local and state public taxes. The economic reasoning behind this assumption is very simple: in traditional market terms, there are substantial "spillover" benefits derived by the public from an educated population. Educated communities and states spend less money on public assistance, criminal justice, unemployment compensation and receive far more tax revenues from higher wages, more consumption of products, and property, which are often taxed by local and state authority. Indeed, the major public support for the comprehensive community colleges comes from the recognition that for the relatively low public investment comes substantial benefits to the community.

While there are vast differences between state funding of community colleges, there generally are five major sources of funding community colleges. Table No. 1 gives an overview of the revenue sources from community colleges for 2000-2001 - excluding those colleges that are operated by their state systems.

Table No. 1
Current Revenues for Public Community College 2000-2001

Revenue Type	Percent of total	20 Year Change of Total *by Source*
Tuition and fees	18 %	3.4 %
State appropriations	34.8 %	-13.4 %
Local appropriations	15.3 %	-2.1 %
Federal grants and contracts	12 %	6.4 %
State grants and contracts	6.4 %	4.3 %

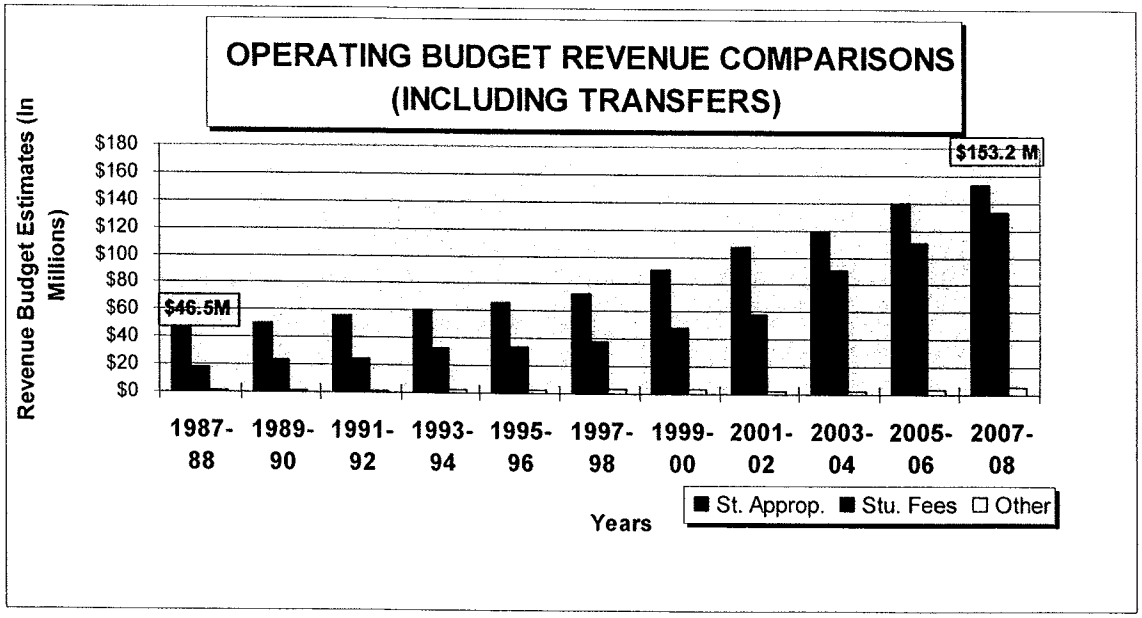
Auxiliary	5.1 %	-1.2 %
Other	8.4 %	2.7 %

(Adapted from Table No. 1, Stephen G. Katsinas and James C Palmer ed. *Sustaining Financial Support for Community Colleges,* Winter 2005, p. 3.

These national trends do not bode well for the equity agenda of the colleges. There is a decreasing support by state and local authorities and more revenue coming from students. Indeed, there are increasing calls for having students pay more tuition, and in some states, the tuition costs of the community college are equal or exceed those of the four-year institutions. Coupled with relatively modest levels of federal Pell grant growth, the community colleges are faced with an enormous problem of attempting to fulfill their mission, while maintaining low tuition so as to attract the students who needs a post-secondary education the most.

The financing of Ivy Tech Community College is substantially different from the national averages. Unlike most states that fund their colleges with a local assessment of property, which is often justified because these institutions draw their enrollment almost exclusively from their communities, they realize the gains for their education. Ivy Tech is one state system which is funded by the state legislature exclusively. This means the state funds the community colleges and the four public universities. In recent years, enrollment has been growing more quickly than state support. The shifting of educational costs to Ivy Tech students can be seen in the chart below:

Table 2



There are major differences in the state operating appropriation per full-time equivalent student count. For all post-secondary institutions the State of Indiana contributed $1.18 billion dollars or on an average $6,471 dollars a year for a full-time student. Yet when this figure is disaggregated, there are substantial differences among institutions. On the

one hand, Indiana University at Bloomington and Purdue University at West Lafayette have appropriations for full-time students which are $8,555 and $8,079 respectively. Ball State University and University of Southern Indiana are reimbursed $6,926 and $4,429 for their students. The state funding of the 42,663 full-time equivalent students at Ivy Tech Community College is $3,377 -- less than half of what the Indiana University and Purdue receive. (Appropriation per Hoosier and Reciprocity FTE 2005-06, Commission on Higher Education).

Moreover, the available data on tuition and fees indicate that Ivy Tech has attempted to stay within the traditional mission of a community college by maintaining lower tuition and fees. In a study completed by the Commission of Higher Education, examining a 10 year history of tuition and fees for first time entry-level students from 1995-96 to 2005-6, four-year public institutions raised their tuition and fees 113 percent with the average annual increase of 7.9 percent. In contrast, two-year public institutions increased their tuition and fees 53 percent, with average annual increases of 4.4 percent. (Critical Postsecondary Issues in Indiana, March 2006)

The state support for Ivy Tech is even less than the support for the regional campuses of either Indiana University or Purdue. These institutions offer two-year degrees, though they are gradually getting away from that role and were originally designed to serve the transfer function. For example Indiana University at Kokomo receives $4,951 per student; Purdue University at Calumet $4,535. Even Vincennes University, a community college received $5,140(Commission on Higher Education).These funding differences exist despite the fact that Ivy Tech serves students with far more learning issues and economic needs. It also provides a significant barrier to institutional growth.

Organization:

The organization of a community college system is important for the growth and development of the institutions. Perhaps because Indiana had a "late start" in the implementation of a community college system, it had learned from previous organization models and developed the comprehensive community college as a statewide system of one college. No other state has one state community college with 23 regional campuses. As one college, accredited as a single institution, Ivy Tech is one of the largest community colleges in the United States.

There are significant reasons to suggest this approach makes very good sense. If the purpose of the community college is to play a role within the system of higher education in Indiana, it makes sense to have one institutional entity representing the functional role of the community college. Moreover, since Indiana is a state with a cohesive state economic and workforce redevelopment strategy, the development on the state level of one organization makes extremely good sense. In addition, a state system permits the rural areas of Indiana to enjoy a better mix of curriculum and student services than they could afford if "local financial control" was practiced. As a state with significant social and cultural attachment to rural areas, this is an important consideration.

Finally, the development of a common course structure, degree requirements and perspective encourages not only efficient operations, but also a clear ability to "brand" the institution for Hoosiers as the post-secondary institution for adults to initiate their college education. More than half of all community college students take developmental education, yet the definitions of what constitutes remedial education is often done differently by the same community colleges within one metropolitan area. Ivy Tech, as one state community college, has established common scores for what is "college ready" that are implemented all over the state. This is an enormous advantage to the institution and to the state's ability to serve the existing workforce and to attract new business and industry.

Many recent studies of community colleges have noted that consistency and reinforcement within the institutions are important determinants of college success. Within the community colleges of the United States, there is a growing recognition that centralization of organizations produces more innovation. The states with some forms of centralization, such as Florida, Kentucky, Washington and North Carolina, possess systems which often are on the cutting edge of innovation and change. Decentralization does not produce innovation, often because the size of the institutions and the pressing need to continually react to the day-to-day challenges of their communities make it impossible to develop let alone sustain innovations. Thus, it is the larger institutions and the state systems that can take the risks to become the initiators of change and development.

There are also financial considerations which warrant a centralized system. Since there is not local support for post-secondary systems in Indiana, it makes little sense to have local units of control have the authority of colleges where there is no financial support. Ultimately, under the present system, the legislature of Indiana and the governor control the financial future of the community colleges. Given this reality, it makes sense for the one college state.

However, there are significant dangers that must be avoided in this approach. The strength of the community college is its ability to define the needs of the community and meet them. There are of course significant regional differences within the state of Indiana. These differences must be considered in the development of the colleges. The development of regions with their own chancellors who are responsible for implementation of relevant programs to implement programs becomes very important. It also allows for significant variation in which workforce programs will be introduced in specific areas. The local employer mix and sectors are obviously different within specific communities of Indiana. Thus, the centralization of specific administrative and curriculum functions should not undercut the ability of the regions to match their curriculum offerings and their specific activities to fit the needs of their communities.

An Agenda for the Future:

Within its short existence as a comprehensive community, Ivy Tech Community College has made impressive strides. There is a dedicated staff, many of whom come from other

community colleges, which are attracted to the importance of establishing statewide comprehensive community colleges. As a system, Ivy Tech has grown quickly and it is having a positive impact within Indiana. Private sector business has expressed their support for the system. However, the benefits from comprehensive community college are still yet to be fully realized in Indiana. For Ivy Tech to develop further there needs to be further development of the comprehensive community college. The following areas are suggested as a way of growing the institution and deepening its connections with the citizens of Indiana. They are organized around three major areas: transfer mission, workforce mission, and capacity and sustainability.

Transfer Mission

1) Build relationships with local schools: The statewide network of campuses and learning centers, existing strong connections with secondary schools, common curriculum, and dual mission make Ivy Tech Community College a unique resource within the state to boost college going and completion rates and to provide opportunities to underserved students. Ivy Tech is already the major partner in dual credit in professional/technical programs. With the Core Transfer Library in place, the College can expand its leadership role and commit to making dual credit opportunities available in a minimum of two CTL courses at every high school, either through using qualified high school faculty, through serving students at the nearby Ivy Tech campus, through Ivy Tech's offering courses at the high schools, or through distance education. Other efforts are also underway to provide alternatives in the high schools to determine how students are progressing toward academic readiness.

   Other national efforts to promote high school completion and college matriculation hold promise for Indiana. Gateway to College is a Gates-funded initiative to reach out to high school students at risk of dropping out. Using an intensive, case management approach, students in Gateway programs are encouraged to stay in school to completion, and most are able to make significant progress toward an associate degree. Ivy Tech is seeking funds to support a Gateway program in Indianapolis in fall 2009. Other efforts are also underway, and may show how such intensive interventions can be brought to scale around the state. New funding streams that can support these activities must be identified.

2) Improve transfer opportunities: Fifty three percent of students cited transfer to a four-year college or university as a primary or secondary goal for enrolling in Ivy Tech (CCSSE, 2005). With that level of interest and with the potential for even further enrollment growth, the community college can be the major feeder to universities and the major catalyst for increased baccalaureate completion and retention within the state. The greatly expanded opportunities now provided by two statewide transfer initiatives – the Core Transfer Library and 12 program articulations – will allow the community college to build beyond an already growing record of transfer.

   The program transfer landscape remains complex. As university curricula differ, so do Ivy Tech transfer curricula, which must be established for each program for each

university. Other states have addressed this issue in a more comprehensive way. The Ohio Transfer Module and the Illinois Transferable General Education Core Curriculum are examples of how neighboring states have identified blocks of credit that can transfer and apply in similar ways at public institutions. This approach maximizes students transfer potential. Indiana may want to move to such a core transfer curriculum approach to supplement existing program transfer agreements and to encourage greater transfer.

3) Improve completion: Increasing completion is a challenge for all community colleges. In an economy where credentials matter, more students must successfully earn a certificate or associate degree prior to leaving the community college. Efforts to improve completion were set in motion at Ivy Tech in 2005. Effective strategies in promoting completion among adult students must reduce as many of the barriers as possible that can keep students from finishing, designing programs that can complement already complicated lives.

   The College for Working Adults, successfully launched in fall 2007, is a statewide effort to offer relevant, attainable associate degrees. It is hoped that the guaranteed predictability of schedule and the peer support of the cohort will give students the control over their time and their learning experiences that will result in more students being able to earn degrees in a more timely manner. Results of current pilots are promising – the semester to semester retention rate is 83 percent, exceeding the college wide rate. Grade point averages are also higher. New degree programs are planned for 2008, including one that will reach the substantial numbers of students who are interested in transfer opportunities in liberal arts/psychology.

   Younger students can also face barriers to completion, especially barriers of inadequate preparation, motivation, and cost. A completion-oriented approach for young students is currently under development, aimed at low-income high school students who may face limited options for higher education. Students will be recruited at the beginning of the 11th grade, and will receive support services as they complete high school. They will then move on through a bridge experience in the summer after graduation, followed by a nine-month associate degree. Degree programs will be offered in the 35-hours-per-week of class time that is consistent with their previous high school schedule, which will allow students to earn a degree within a year of graduation. Because of the intensive nature of the curriculum and the target student audience, the program will be offered at no cost to the student. The college is exploring how to fund such a program, particularly the "costs of attendance" to students. These costs of attendance are barely covered by financial aid programs available to community college students, while they are receiving increased attention and funding at residential colleges and universities serving a traditional, and often more affluent, student body.

4) Provide more financial support for the community college and for its students: The national financial dilemma for community colleges was summarized neatly by Gail Mellow, President of LaGuardia Community College, in the keynote speech given at

the 2008 annual meeting of the American Council on Education. "As higher-education leaders, we have allowed the baccalaureate and community-college systems to develop separately and unequally, with tenuous points of integration and inadequate financial support." Disparity in funding is "shocking," said President Mellow, "American community colleges, despite enrolling almost half of all undergraduate students, spend 80 percent less than their public four-year sisters." (Mellow, 2008)

Indiana has the potential, with the nation's newest community college system, to take a different path. The costs to Indiana of having a disproportionate percentage of students start their higher education at higher-cost four-year universities, as compared to enrollment patterns nationally, and the need to put educational opportunities in closer geographic and financial reach of adult students are well documented. Yet current state funding mechanisms for higher education are not particularly responsive to the type of change that Ivy Tech has been experiencing, and the type of change that should be continued and encouraged. Most new appropriations come through the enrollment change formula, which funds past growth, not fundamental changes such as mission change.

The 1960s and 1970s were times of fundamental change in higher education in Indiana. New funding mechanisms were designed to support the development of regional campuses and the statewide medical education centers, to provide larger amounts of state financial support for Vincennes University, and to establish the state scholarship program through the State Student Assistance Commission of Indiana (SSACI). To realize the full contributions that a community college can make to Indiana, the state should consider more comprehensive changes in funding support, as it did in building other parts of the higher education system, rather than continuing with incremental change.

Of equal financial importance in establishing a full community college, system in Indiana is insuring affordability for students. Ivy Tech's tuition is still above the national average, even following years of efforts by the College and by the state to keep tuition costs down. Moreover, the level of support of Ivy Tech operations is continuing to decline. In 1997, the state contributed 71% of Ivy Tech operating costs. Ten years later that contribution had diminished to 52.5%. The costs for Ivy Tech are increasingly born by the students. . Indeed, the tuition charged Ivy Tech is the highest average tuition charged in any community colleges in the neighboring Great Lakes States.

Changes in the state scholarship program – expansion of scholarship funds available for part-time students, addressing the March application deadline that disenfranchises many potential students, and addressing the limiting factor of the "ten year" rule that can make it hard for adult students to return to higher education – are needed. Many adult students work full-time, earning salaries high enough to make them financially unqualified for need-based aid, but too low to support consistent college participation. Yet if they could receive aid, they could take more classes to accelerate their progress

toward completion of a degree, and thereby move into a higher salary bracket. To provide more equal access to the range of students the community college currently serves, and new students it should be serving, new approaches to financial aid must be developed. Low tuition by itself is not enough.

Workforce Mission

5) Coordinate more effectively with the Workforce System and with Indiana Employers: Currently there are partnerships between local workforce boards and regional campuses of Ivy Tech, often the result of local relationships. In other areas of the state, there is a competitive relationship or none at all. As a state investment, the Indiana Department of Workforce Development should make Ivy Tech the principle educator and trainer for their workforce activities. Ivy Tech presents a significant resource that should be utilized by the state to achieve economic and workforce development targets. Ivy Tech needs to be "at the table" when local economic development groups are determining what businesses they will recruit and how to retain current business that is vulnerable to change. In most regions, Ivy Tech personnel serve on various economic development committees; in others, there is less opportunity or welcoming environment for our participation.

Ivy Tech currently serves on the boards of Conexus, BioCrossroads/LINX as well as the Indiana Energy Consortium, to name a few. Our membership on these important economic development entities serve as a reminder of our leadership role and the importance of workforce development in the areas of advanced manufacturing, transportation and logistics, biotechnology and related fields and the energy sector. Ivy Tech is viewed by these not only as playing a significant workforce role in attracting businesses to the State of Indiana but also providing a link to current employers in these sectors with our training. These organizations assist Ivy Tech to remain at the forefront of recognizing and addressing emerging needs in these industries. Ivy Tech is in the process of developing advisory groups from the private sector to ensure we provide cutting edge training in our state's growth areas for economic development.

Ivy Tech can do much more to engage employers in the discussion about how to enhance the skills of Indiana's workforce. Many companies and businesses have tuition reimbursement programs for their employees. These resources are often under-utilized by employees for a variety of reasons, primary among which is that, for lower-paid employees, it simply is too difficult to pay the tuition up front even though it will be reimbursed later. Often the employee has to pay for a second semester before the reimbursement check arrives from the first semester. Ivy Tech will identify a number of employers with such programs and work with their employees to "defer" tuition until the end of the semester when the grade has been earned and the employers then billed for the training event. A deferred tuition program can work for students taking both credit and non-credit courses.

Ivy Tech should take a leadership role in training public employees as well as privately employed workers. The State of Indiana employs 38,000 workers. This does not include the number of workers employed by local government. As one of the State's largest training providers, Ivy Tech should be viewed as the economical, effective trainers for the State's own training needs. While Ivy Tech already does significant training of firefighters, EMTs and other public safety personnel, as well as some minimum training for court personnel, with Ivy Tech's many campuses, we should be the preferred training provider and training location of most state training opportunities. Why should the State of Indiana's various departments pay for training sites when Ivy Tech campuses are within a short drive from anywhere in the state? We also offer on-the-job training sessions which is helpful to the continued operation of government services. Ivy Tech should become the State's number one training provider and assist the State in emphasizing the importance of training its' own employees.

The economic development of Indiana unfolds within a global economy. Many significant companies in the state have investments in many countries and some are foreign owned themselves. It would be important as part of both a workforce and transfer strategy for students attending Ivy Tech to learn more about the global economy. This could take the form of internships and apprenticeships with Indiana companies at their overseas operations. It could also be a student exchange program initiated with other two-year technical colleges around the world. It could also be a specific project initiated by Ivy Tech regions within other countries following the example of community colleges in other states. These activities can be costly in terms of staff time and institutional resources, yet they would add a significant dimension to Ivy Tech's offerings and Ivy Tech students who have had such experiences would come to the workplace with a distinctive competitive edge.

6) Engage in more outreach to adult populations: In a recent Indiana Chamber of Commerce report, *Indiana's Adult Education and Workforce Skills Performance Report*, it is reported that there are over 931,000 adults in Indiana who either have no high school diploma, speak little or no English, or who have no college experience and are in families who earn less than a living wage (calculated at twice the level of poverty). There are many subgroups among this large number of Hoosiers who can benefit from the programs and services offered by Ivy Tech. One such subgroup is ex-offenders. Ivy Tech is perfectly suited to be the education and training provider for those offenders both before they are released and once they have returned to their communities. It is undisputed that educational attainment and meaningful employment are key factors to reduce recidivism. With additional funding, the College can identify targeted subgroups and develop programs aimed at helping them be successful in earning a credential (certifications, technical certificates, or an associate degree).

There are a significant number of Hoosiers within the Indiana workforce with some college but no degree or certificate. These individuals could return to post-secondary education quickly, especially if specific barriers could be lifted. With some additional

targeted funding, Ivy Tech could develop a program which would evaluate the previous educational credits earned by the adult and any prior learning experiences that individual may have had in the workplace or the military. The College can also quickly determine if remedial or developmental courses would be needed for them to successfully advance into a program, and offer remedial intensives that would allow students to enter college with the appropriate skills. In some cases, the barrier may be a simply waiving of library fines or small unpaid bills. The new functional unit would be responsible for understanding the common barriers that prevent adults from returning to school, and what the College and the state could do to eliminate them.

The College can also target adults who have recently received GEDs from the Adult Basic Education (ABE) programs in Indiana. Ivy Tech can work with ABE programs to ensure a seamless transition from the ABE programs into postsecondary work and to ensure that students understand what resources are available to them to support college-level work.

The College recognizes that, while degree completion is an appropriate goal for many students and one that will move them further on the earnings continuum, there are also many students who come to the College to complete a few courses (2-5 courses, 6-15 credits) and are then able to acquire a job that represents an improvement in earnings or status. The College should develop more certification-based sequences of courses so that a credential can be associated with the completion of these short-term sequences of courses and a meaningful credential (i.e., one that is industry-recognized) attached to the student's learning experience.

In order to reach the 385,775 adults of the 931,366 identified in the recent Chamber Performance Report who have no college education and who earn less than a living wage, Ivy Tech, along with its partners in the Joyce Foundation "Shifting Gears" Initiative, have identified marketing as a critical component to our success. How do we reach out to this significant population? How to we convince them that returning to college for either credit or non-credit courses will improve their lives and the lives of their children. The marketing team of Ivy Tech as well as the marketing personnel from the Indiana Chamber and the Department of Workforce Development are putting together the marketing strategy to reach this largely ignored population. It is Ivy Tech's plan for the Workforce and Economic Development Department to move from enrolling approximately 27,000 students in credit and non-credit courses in 2004-05 to over 41,000 in 2010. This number must continue to increase significantly over the next decade.

7) Support More Non-Credit Activities: Similar to other public colleges in Indiana who are identified as "growth" institutions, Ivy Tech is awarded additional funding per a formula for enrollment change funding, although in any specific year the formula may not be fully funded. Currently, the awarding of growth funding is for credit activity only. Non-credit activities must be priced in such a way as to "pay for themselves." Several states now receive at least some funding that recognizes the non-credit activities of the public colleges, with such funding usually being quite

limited in definition of what kind of activity it recognizes. Were Indiana to begin recognizing the non-credit activities delivered by the regional offices of Workforce and Economic Development (WED), such funding could be used to further build capacity to deliver the necessary non-credit activities that support the State's *Accelerating Growth* Plan.

Another way that the College can better attract students into degree programs is create more awareness through marketing of the opportunities for the evaluation of prior learning experiences acquired through the workplace, military, volunteerism and other learning experiences. In the case of non-credit experiences for which a nationally recognized credential such as a certification or licensure has been earned, the College uses the "Certification Crosswalk" to identify the match between the skills achieved in the preparation for the certification examination and the credit course in which those skills are taught. Each College program has identified several learning experiences for which credit may be granted automatically, and at no charge to the student, through the crosswalk. In cases where there is not a nationally recognized credential, a portfolio can be developed that documents the student's prior learning for the possible awarding of credit. The College can do more to market these opportunities to prospective adult students, many of whom have engaged in prior learning experiences, so that more students can be attracted into degree programs with the intention of moving more quickly through the program because of the credits awarded.

Capacity and Sustainability

8) Expand capacity and scalability: As implied in several other portions of this paper, the College clearly has some concerns about its ability to continue building capacity so that we can continue to respond to the pressures of increasing enrollments, the pressure from the State to serve new populations and to meet new workforce challenges, and the pressure to maintain ongoing operations while adding new initiatives. The College is currently in an unusual cycle of change with a new president, new board, implementation of a new enterprise system (Banner), and is preparing for re-accreditation as a statewide system. The recent Chamber Performance Report reminds us that Indiana has over 900,000 low-skilled adults who need the kinds of programs and services that Ivy Tech can provide. Being able to maintain quality in the face of numerous changes and new initiatives is exerting significant pressure on the system. Ivy Tech will need more support than ever from the legislature and from other State entities in order to meet these challenges and more in the near future.

Like many other community colleges, Ivy Tech is reliant on adjunct faculty: fulltime faculty account for 21 percent of all faculty, adjunct faculty, 79 percent. In recent years, high enrollment growth and expansion of the program and course inventories have made it difficult to make significant progress in terms of faculty-student ratios. Though 270 new fulltime faculty positions were added between 2002 and 2007, the ratio of adjunct faculty to fulltime faculty went from 3.4 to 1 to 3.75 to 1.

Faculty salary levels at Ivy Tech are proportionally lower than community colleges nationally. In 2002-03, the gap between the $37,800 average for Ivy Tech faculty and the $49,700 average for two-year colleges (with academic rank) nationally was $11,900. That gap has grown slightly larger since then: in 2006-07, Ivy Tech was at $42,900 and the comparable national average was $54,895, a gap of $11,995. The College has provided an extra one percent increase for faculty above the standard raise for other employees every year since 2001; without that initiative, the gap would have been much wider. The College has also sought additional help from the state, requesting increase-operating appropriations for faculty salaries in the biennia between 2001-07. No additional appropriation was made available, however.

Without doubt, a big internal challenge facing Ivy Tech is the lack of coordinated, coherent student affairs programs and services designed to ensure student success. Missing in the student success formula are a cadre of co-curricular and extra-curricular activities, including service learning and civic engagement opportunities; an organized approach to enrollment management that starts with prospects and takes them through program completion; and academic development and support services, ranging from new student orientation to tutoring to advising to career planning and placement. The College acknowledged this challenge in 2005-06 and submitted a grant application to the Lumina Foundation to fund the first-ever senior officer responsible for student affairs and enrollment management. That individual has taken a comprehensive of the student affairs programs, services, and staffing models, both centrally and regionally. *The Pathways to Student Success* model is already in place which provides a framework for ensuring student access to available services and matching their needs with their goals. The College's revised 2010 strategic plan contains a strategy and associated objectives that will benefit students a launch a new era in student affairs in the College.

9) Use technology effectively to promote quality and access: Distance education enrollment continues to grow as fast as or faster than the enrollment growth rate in the College. The largest percentage of enrollment in distance education courses is in fully online classes. More than 20,000 students per semester now take at least one class online. Approximately 300 Ivy Tech classes are available online.

Ivy Tech is now using a common course library model for the development of new online courses. Once a course is developed by a team of experts in the content area and in instructional design, the course is made available to all faculty members, thus reducing development costs and ensuring a high quality experience for all online learners. Development work into single Internet versions began with the "Top 20" enrolled online courses, which serve more than 40 percent of all students enrolled in online courses. Hybrid courses, combining traditional instruction and on-line academic content, are used extensively, particularly in the College for Working Adults.

In addition to course development, the College is identifying additional strategies for the support of distance education students and faculty. New technologies such as

IHETS Interactive will allow the college to provide new services to students as well as existing services in new ways. IHETS Interactive holds promise as a resource for student-to-student interaction as well as for faculty interaction both in the classroom setting and as an advising tool.

Expanding use of technology-enhanced instruction will continue to be important for the community college. Because many distance students also take on-campus classes, technology cannot address all problems of over-crowded facilities, but it can continue to be used to advantage to handle enrollment growth. Internet instruction also has great potential in reaching the high school population. Secondary students may take Core Transfer Library courses from Ivy Tech via the Internet for dual enrollment, and students may choose to complete their high school diploma through Ivy Tech's on-line Fast Track to College program.

10) Improve Remediation Strategies: As indicated previously in this paper, the need to take remedial courses can present a significant barrier to students wishing to participate in higher education. Although the skills development course offerings are appropriate and are well enrolled, we know that many students become frustrated with their seeming lack of rapid progress through the courses and into their discipline-specific courses. Ivy Tech is doing what we think is groundbreaking work in the areas of accelerated and compressed remediation and in embedded skills. With the support of grants from both the Lilly Endowment and the Joyce Foundation, several Ivy Tech campuses are running pilot projects in the area of remediation.

    Four campuses are experimenting with embedded skills courses in which basic skills are taught along with the technical content; in most cases, a credential can be earned as part of the experience, e.g., an Automotive Service Excellence certification or the Child Development Associate. Several other campuses are providing a variety of alternatives to traditional scheduling and delivery formats; in addition, the campuses are testing different approach to helping students become program-ready more quickly through new remedial software and resources. We are fortunate to have the services of an academic research analyst, also supported by the Lilly Endowment remediation grant, to use standard research protocols to analyze the success of the various approaches. The College should be able to sustain work on the campuses already experimenting with new approaches and to share successful practices across campuses after the next 12-18 months of practice and study.

Clearly, these are not the only suggestions for expansion of Ivy Tech Community College. All these efforts would do much to continue the development of Ivy Tech as a comprehensive community college system, well-positioned to serve the citizens of Indiana.

Summary and Conclusion:

With its multiple missions, Ivy Tech is facing challenges typical of other community colleges across the nation. The largest challenge is articulated in the recent Indiana Chamber *Performance Report*, identifying the hundreds of thousands of Hoosiers who

need education and training to move them along the continuum to improved work circumstances, family-supporting wages, and achievement of the necessary credentials to enhance the 21st century economy in Indiana. We realize that the timing is difficult for Indiana, with the focus on resolving the property tax dilemma and many deserving entities clamoring for the limited resources that are available. However, we believe that Ivy Tech is the institution best positioned to serve the educational needs of the Indiana populations identified above. With its statewide infrastructure, its qualified faculty and its academic programs grounded in the workforce needs of Indiana, with its non-credit courses and customized training, Ivy Tech represents a wise investment in the future of the State. With its affordable tuition and open-access programs, Ivy Tech is a smart choice for the student wishing to eventually complete a bachelor's degree. We look forward to the time when Ivy Tech is the college of first choice for students, as are community colleges in those states that have more mature community college systems.

The institution is currently performing its mission, but with a little more financial support, and commitment by state leadership, the institution could meet these challenges. The staff is prepared, the leadership is dynamic, and a vision and strategic plan have been articulated. Now there needs to be the political will and public support to make it happen.

Ivy Tech Community College needs the support of all parts of the Indiana higher education community. The recent growth and expansion of the institution has not been received positively among some in the higher education community. There are concerns that Ivy Tech's growth and development may somehow threaten the resources of the other institutions or not meet the standards of the four-year institutions. However, these fears should motivate not a curtailing of activities, but rather a system wide support for the expansion and growth of Ivy Tech. On the national level, the same issues are found. As Gail Mellow, President of La Guardia Community College, in her recent address to the American Council of Education so brilliantly put it: "We must stop giving community college straw and expect them to spin gold. The fact is that what happens to community colleges affects all higher education." (Mellow, 2008).

Ivy Tech is part of the fabric of Indiana higher education -- and it is in the interest of all colleges to see it grow and prosper. The future development of Ivy Tech Community College is in the interests of the citizens of Indiana, the private sector and all parts of all higher education.